

IN THE CLAIMS:

Please amend the claims as follows:

Claims 1-3 (Cancelled).

4. (Currently Amended) A method for purifying used oil, comprising:
mixing the a raw used oil that contains light hydrocarbons with a phase transfer catalyst in the presence of a base compound, wherein the phase transfer catalyst comprises a glycol; and
removing contaminants from the used oil.
5. (Cancelled).
6. (Previously Presented) The method of claim 4, wherein the phase transfer catalyst comprises ethylene glycol.
7. (Previously Presented) The method of claim 4, wherein removing contaminants from the used oil comprises distilling the used oil at a temperature of about 200°C to about 275°C and a pressure of about 100 torr to about 200 torr.
8. (Previously Presented) The method of claim 4, wherein removing contaminants from the used oil comprises distilling the used oil at a temperature of about 275°C to about 300°C and a pressure of about 0.05 torr to about 0.2 torr.
9. (Previously Presented) The method of claim 4, wherein removing contaminants from the used oil comprises distilling the used oil at a temperature of about 200°C to about 300°C and a pressure of about 0.05 torr to about 200 torr.
10. (Cancelled).

11. (Previously Presented) The method of claim 4, wherein the base compound is an inorganic or organic base compound.

12. (Previously Presented) The method of claim 11, wherein the inorganic base compound is selected from the group consisting of sodium hydroxide, potassium hydroxide, and combinations thereof.

13. (Previously Presented) The method of claim 4, wherein a mixture of the used oil and phase transfer catalyst comprises about 1% to about 10% by weight of the phase transfer catalyst.

14. (Cancelled).

15. (Cancelled).

16. (Previously Presented) The method of claim 4, wherein the used oil comprises motor oil.

17. (Currently Amended) A method for removing contaminants from a used petroleum distillate, comprising:

mixing the used petroleum distillate that contains light hydrocarbons with ethylene glycol in the presence of a base compound; and

removing the contaminants from the used petroleum distillate using means for distillation.

18. (Previously Presented) The method of claim 17, wherein the used petroleum distillate comprises motor oil.

19. (Previously Presented) The method of claim 17, wherein removing contaminants from the used petroleum distillate comprises distilling the used petroleum distillate at a temperature of about 200°C to about 275°C and a pressure of about 100 torr to about 200 torr.
20. (Previously Presented) The method of claim 17, wherein removing contaminants from the used petroleum distillate comprises distilling the used petroleum distillate at a temperature of about 275°C to about 300°C and a pressure of about 0.05 torr to about 0.2 torr.
21. (Previously Presented) The method of claim 17, wherein removing contaminants from the used petroleum distillate comprises distilling the used petroleum distillate at a temperature of about 200°C to about 300°C and a pressure of about 0.05 torr to about 200 torr.
22. (Previously Presented) The method of claim 17, wherein a mixture of the used petroleum distillate and ethylene glycol comprises about 1% to about 10 % by weight of ethylene glycol.
23. (Cancelled).
24. (Cancelled).
25. (Currently Amended) A method for removing contaminants from used motor oil, comprising:
mixing the used motor oil that contains light hydrocarbons with ethylene glycol in the presence of a base compound; and then
distilling the used motor oil at a temperature of about 200°C to about 300°C and a pressure of about 0.05 torr to about 200 torr.

26. (Previously Presented) The method of claim 25, wherein the base compound comprises an inorganic compound.

27. (Previously Presented) The method of claim 26, wherein the inorganic base compound is selected from the group consisting of sodium hydroxide, potassium hydroxide, and combinations thereof.

28. (Previously Presented) The method of claim 25, wherein a mixture of the used motor oil and ethylene glycol comprises about 1 to about 10 % by weight of the ethylene glycol.

29. (Cancelled).

30. (Cancelled).

31. (Currently Amended) A method for removing contaminants from used motor oil, comprising:
mixing the used motor oil that contains light hydrocarbons with an inorganic base compound;
mixing the used motor oil containing light hydrocarbons with a phase transfer catalyst in the presence of the inorganic base compound, wherein the phase transfer catalyst comprises a glycol; and then
distilling the used motor oil at a temperature of about 200°C to about 275°C and a pressure of about 100 torr to about 200 torr.

32. (Previously Presented) The method of claim 31, wherein the inorganic base compound is selected from the group consisting of sodium hydroxide, potassium hydroxide, and combinations thereof.

33. (Cancelled).

34. (Previously Presented) The method of claim 31, wherein the phase transfer catalyst comprises ethylene glycol.

35. (Previously Presented) The method of claim 31, further comprising distilling the used motor oil at a temperature of about 275°C to about 300°C and a pressure of about 0.05 torr to about 0.2 torr.

36. (Previously Presented) The method of claim 31, wherein a mixture of the used motor oil and phase transfer catalyst comprises about 1 to about 10 % by weight of the phase transfer catalyst.

37. (Cancelled).

38. (Cancelled).

39. (Previously Presented) The method of claim 11, wherein a concentration of the base compound in the used oil is between 0.5 and 5 weight percent on a dry weight basis.

40. (Previously Presented) The method of claim 17, wherein a concentration of the base compound in the used petroleum distillate is between 0.5 and 5 weight percent on a dry weight basis.

41. (Previously Presented) The method of claim 26, wherein a concentration of the base compound in the used motor oil is between 0.5 and 5 weight percent on a dry weight basis.

42. (Previously Presented) The method of claim 32, wherein a concentration of the base compound in the used motor oil is between 0.5 and 5 weight percent on a dry weight basis.